# Locations for renal services – patient satisfaction surveys

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# **SUMMARY**

Renal services have been given priority in recent years in an attempt to align them with levels of provision in other European countries. A survey of patients receiving renal replacement therapy in the Northern Ireland Regional Centre, Belfast, was carried out to ascertain their views on services (survey I). After the establishment of a Northern Health and Social Services Board (NHSSB) sub-regional unit in 1995, the survey was repeated for patients attending the new unit (survey II). In survey I,53% NHSSB patients responded. Travelling time to and from hospital was a major issue for the majority of patients, with 33% of haemodialysis patients receiving twice weekly treatment unwilling to attend more frequently, even if clinically advised to do so. In survey II, 60% of patients responded. Travel times to the sub-regional unit were significantly shorter and patients felt it provided a similar or better standard of service, compared with the regional centre. All the twice weekly haemodialysis patients would increase to thrice weekly if clinically advised to do so. The study underlines the importance of locating dialysis facilities closer to patients' homes.

# INTRODUCTION

The number of patients accepted for renal replacement therapy (RRT) has risen more than three-fold since the early 1980s. This increase has been largely due to the referral and acceptance of older patients for RRT, many of whom have co-morbidity.

Morbidity and mortality in haemodialysis patients are related to the quality and quantity of the dialysis provided.<sup>2</sup> It is widely accepted that the majority of patients should receive dialysis three times per week. This regimen results in better control of uraemic symptoms and fewer peaks and troughs in general wellbeing.3 The Renal Association and the Royal College of Physicians report on treatment standards for adult patients with renal failure in 1995, recommend three times weekly haemodialysis. 4 The 1995 review of renal services in Northern Ireland by the Department of Health and Social Services recommended that the target of 90% of haemodialysis patients receiving dialysis thrice weekly be achieved as soon as possible.<sup>3</sup> At the time the survey was carried out here, less than 50% of haemodialysis patients were receiving treatment three times weekly.

Long travel times are thought to detract from RRT patients' quality of life and will have a

bearing on patients' willingness to increase from twice to thrice weekly dialysis. Little information exists about the distances travelled and the subsequent impact on their satisfaction.<sup>1,15</sup> A study was therefore carried out to determine the influence of travelling duration and timing of treatment on dialysis patients and patients' perceptions of the service provided. The study was repeated after the opening of a sub-regional dialysis unit closer to the study population.

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# **METHODOLOGY**

Survey I

After piloting an initial questionnaire on patients attending the regional centre for RRT, questionnaires were redesigned to be specific for either haemodialysis or CAPD (continuous ambulatory peritoneal dialysis) treated patients, as separate issues had been identified in these two groups.

Questionnaires were distributed to every patient attending the regional centre for RRT during November and December 1993 by the nursing staff, regardless of Board of residence. Patients completed only one questionnaire each. The centre treats patients from all four Boards in Northern Ireland, but for the purposes of this paper only the views from Northern Health & Social Services Board (NHSSB) patients are reported. Patients were asked to return the questionnaires in a prepaid envelope. Due to the method of distributing the questionnaires no information was available on non-responders. The questionnaire covered issues of choice about types and timing of treatment, verbal and written information received and the travel times involved. Views about the relative importance of some quality issues, e.g. access to a counselling service and contact with the same nursing team were scored on a scale of one to four, where one was "not at all important" and four was "very important".

# Survey II

Following the opening of a six-bed haemodialysis unit in the NHSSB area, run by a single consultant nephrologist retaining academic and clinical links with the regional centre, a second patient satisfaction survey was carried out on those attending the new sub-regional unit.

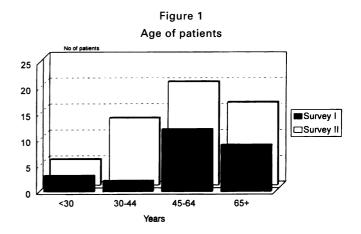
The questionnaires remained unchanged apart from the addition of one section, to allow comparisons between the regional centre and the sub-regional unit, for those patients who had transferred their site of treatment. The haemodialysis patients were given the questionnaires at the end of a dialysis session and were asked to return them in a pre-paid envelope. The CAPD patients were surveyed by post. As a list of all patients attending the unit for RRT was available, information on age of nonresponders could be collated. The data was analysed using the Statistical Package for Social Sciences (SPSS).

Differences in proportions, using the Chi-squared statistic for contingency tables, were assessed.

#### **RESULTS**

Survey I

Forty-nine NHSSB patients were given questionnaires. Twenty-six responded (53%); 16 of these were receiving haemodialysis and 10 were receiving CAPD. The ages of responders are shown in Figure I. Employment status is shown in Table I.



The travel times from home to the regional centre, for haemodialysis and CAPD patients, are shown in Table II. Fifty-six percent of the haemodialysis patients spent between one to two hours travelling for each dialysis session, and 25% spent two to four hours travelling, up to three times per week.

The mean scores for the quality issues for haemodialysis patients are shown in figure 2 "Leaving for home promptly" was ranked as the most important, closely followed by "commencing treatment promptly". The CAPD group ranked "discussion of progress and management with the consultant at regular intervals" as being the most important.

As a result of travelling, and other factors, one third of haemodialysis patients receiving treatment twice weekly said they would not be prepared to attend more frequently even if clinically advised to do so.

#### Survey II

During February 1996, 45 questionnaires were given out to NHSSB patients attending the subregional unit, 26 of whom were receiving haemodialysis and 19 were receiving CAPD. Responses were received from 14 (54%) haemodialysis, 13 (68%) CAPD.

Table I

Employment status of patients

Employment Status	Survey I - 1993	Survey II - 1996
Employed	4 (15%)	7 (13%)
Full-time	1 (4%)	1 (2%)
Part-time	3 (11%)	6 (11%)
Not emloyed	22 (85%)	47 (87%)
Unemployed	5 (19%)	10 (19%)
Homemaker/housewife	2 (8%)	12 (22%)
Retired	13 (50%)	20 (37%)
Invalidity	0 (0%)	2 (4%)
Not known	2 (8%)	3 (5%)

Table II

Travel times

Travel Times	Regional Centre (Haemodialysis & CAPD)		Survey II (Haemodialysis, CAPD & Transplant)	
	Survey I	Survey II	Regional	Sub-Regional
Less than 30 minutes	3 (11%)	4 (16%)	5 (9%)	22 (41%)
30 - 59 minutes	14 (54%)	9 (36%)	19 (36%)	22 (41%)
60 - 89 minutes	8 (31%)	8 (32%)	20 (38%)	6 (11%)
90 - 119 minutes	1 (4%)	3 (12%)	4 (8%)	3 (5%)
At least 120 minutes	0 (0%)	1 (4%)	5 (9%)	1 (2%)
Total	26 (100%)	25 (100%)	53 (100%)	54 (100%)

Figure 2
Mean scores of quality issues
Haemodialysis patients

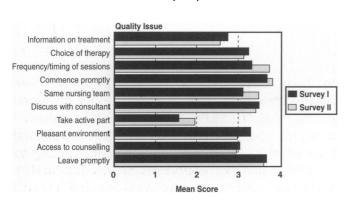
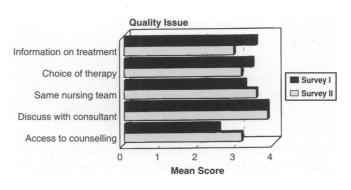


Figure 3
Mean scores of quality issues
CAPD patients



The ages of the responders are shown in figure 1. Employment status is shown in Table I. There was no significant difference in age ( $x^2 = 1.87$ , p = 0.39, 2 df), or employment status (Fisher exact 2 – tailed p-value = 0.19) between the responders in survey I and II. Nor was there a significant difference in age between the responders and non-responders in survey II ( $x^2 = 1.76$ , p = 0.41, 2 df).

There was no significant difference between the travel times to the regional centre for patients in survey I and survey II ( $x^2 = 0.94$ , p = 0.33, 2 df). It was therefore assumed that the two patients groups were broadly comparable with regard to geographical distribution.

The sub-regional unit was described as being more convenient than the regional centre by 24/25 (96%) patients who answered this question. Travel times from home to the sub-regional unit were significantly shorter than to the regional centre ( $x^2 = 7.45$ , p = 0.024, 2 df).

Ninety-six percent of patients had attended the regional centre before the sub-regional unit opened. Patients who had attended both were asked did they find the service at the sub-regional better, similar or worse compared to that at the regional unit. Twenty-seven percent found the service in the sub-regional unit to be better and 69% found it to be similar to the service in the regional centre.

When asked to nominate one most important quality issue, most haemodialysis patients answered "being able to leave promptly", as in survey I. However, this did not accord with the results from the quality issue questions, which rated "commencing sessions promptly" as the most important (figure 2), although both are concerned with time management. "Discussion of progress and management with the consultant at regular intervals" consistently rated as the most important quality issue by the CAPD patients.

All (three) of the haemodialysis patients currently receiving treatment twice weekly would be prepared to attend more frequently if clinically advised to do so.

# **DISCUSSION**

Concern has been expressed in recent years that patients with end-stage renal failure are less likely to receive RRT in the UK than in other European

countries.<sup>1</sup> It has been reported that referral of patients aged 60 years and over declines with distance from the main renal unit for the area, independently of other variables. The effect was most noticeable for patients aged over 75 years.<sup>1</sup> Various explanations have been given for this, including the relatively small number of renal units in the UK in comparison to elsewhere.<sup>1</sup> It has also been suggested that clinicians in remote areas may either be unaware of the potential for treating elderly patients with renal failure, or may feel that the difficulties associated with the travelling to treatment may outweigh the benefits.<sup>1</sup>

The results of the first survey clearly indicated that time spent travelling to and from a treatment session/appointment; waiting for treatment to start or rapid departure after treatment, are very important to haemodialysis patients. However, the inability to commence treatment promptly, or leave for home promptly, is not necessarily a reflection of the management of the renal unit, but may be a problem with the hospital transport facilities, for example ambulances taking circuitous routes to collect several patients on one journey. This problem is reflected in the fact that 33% of haemodialysis patients receiving treatment twice weekly said they would not be prepared to attend more frequently, even if clinically advised to do so. Although in practice when the possible outcomes of restricting dialysis time to less than that clinically recommended are explained to patients they generally agree to attend as frequently as needed.

As CAPD patients have fewer hospital visits one would expect travelling time to have less of a social impact. This was confirmed in finding longer "maximum travelling times" acceptable. This group of patients was more concerned with issues about their actual treatment such as getting more information, involvement in the decision – making and discussing their progress, particularly with the consultant.

The opening of the sub-regional unit made a positive impact on travelling times and also on patient satisfaction. Over half of the respondents made positive comments regarding the more relaxed, convenient and quicker service provided in the smaller sub-regional unit which allowed more time for discussion with the consultant and nursing staff. This is not a surprising finding as the comparison was between a new, small facility and a large, older, overstretched one, but it is still

useful to confirm that patients are satisfied with the new service.

The questionnaire was deliberately simple and short to increase the likelihood of response and avoid misinterpretation. As a result detailed analyses are not possible on all the issues and therefore some further questions have been raised. Also, the numbers were small in both studies as there was a limited patient population available. As there was no facility for identifying non-responders in survey I, reminders could not be sent out. In order to maintain comparability between the two studies, it was decided not to send reminders to the non-responders in survey II.

When targets are set or recommendations made it is important to evaluate whether they have been met. The recommendations from the initial survey were for the setting up of a sub-regional renal service in the NHSSB area, primarily to improve accessibility for patients and meet the clinical needs of an increasing patient population. The results from the second survey show that after the setting up of such a unit, there was a reduction in travel times for patients as well as an overall increase in patient satisfaction. The study therefore serves to underline the importance of locating dialysis facilities closer to where people live.

# **ACKNOWLEDGEMENTS**

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